

# **Kansas Department of Health and Environment Bioterrorism Preparedness and Response Plan**

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## **Foreword**

This plan was developed by the Kansas Department of Health and Environment (KDHE), Bureau of Epidemiology and Disease Prevention, in collaboration with representatives from local health departments, state emergency management, medical, veterinary, public health and law enforcement professionals and organizations, the Metropolitan Medical Response System (MMRS) in Kansas City and Wichita, and other state and federal agencies. The plan is intended as guidance for bioterrorism preparedness and response for a diverse group of state and local public health and emergency response officials. The main goal of the plan is to outline all the steps necessary for the development of appropriate bioterrorism preparedness and response plans, and to assign individual or group responsibilities for those steps.

The Kansas public health infrastructure must be prepared to prevent illness and death that could result from biological terrorism (BT). This need has been supported by the allocation of federal funds for state and local bioterrorism preparedness initiatives. These initiatives have been propelled by reports of substantial biological weapons development programs and arsenals in foreign countries, attempts by unauthorized persons to acquire or possess biological agents, and high-profile terrorist attacks. Although most biological and chemical weapons are difficult to make and disperse, recent terrorist attacks on American soil have changed our perception of the malevolence and determination of today's terrorists.

Early detection and control of biological attacks depends on a strong and flexible public health system at the local and state level. Public health preparedness efforts include response plan development, up to date communication infrastructure, enhanced surveillance and epidemiologic services, laboratory diagnostic and surge capacity capabilities, education and awareness campaigns, and pharmaceutical stockpiling and distribution procedures. In addition, primary health-care providers must be included in preparation planning because they will probably be the first to observe and report unusual illnesses or injuries.

The success of this plan hinges on strengthening the relationships between private and public health professionals. It requires building new partnerships between the health sector and emergency management, military, and law enforcement agencies. The efforts of all these groups must be coordinated on short notice, and probably under intense pressure, to contain a provoked or naturally occurring infectious disease outbreak. This plan provides a framework for communications among these agencies as well as with the public and the media. Finally, it is important to recognize that while the focus of this plan is bioterrorism, the concepts henceforth should be applied to other infectious disease outbreaks or emergencies that may require the involvement of the Kansas public health infrastructure.

## **Chapter 1 - Operation Overview**

### **1. BACKGROUND**

The State of Kansas has a population of about 2.6 million. The population density of Kansas varies widely, with about two-thirds of the population located in the eastern one-third of the State. The four counties of Shawnee (Topeka), Sedgwick (Wichita), and Wyandotte and Johnson (Kansas City) contain about 44 percent of the State's population. Kansas City includes geographical portions of Kansas and Missouri, and is located in the north-east corner of the State. The cities of Wichita and Kansas City are participants of the Metropolitan Medical Response System (MMRS).

Public health activities in Kansas rely heavily on local health departments - independent agencies with broad jurisdictional authority. The 99 health departments, serving 105 counties, have a variety of in-house information/communication architectures and public health expertise. However, there is a large variation in public health capacity across Kansas and coverage in rural areas is difficult to maintain.

The Epidemiologic Services Section (ESS) is the organizational location of the epidemiology staff who focus in infectious disease and environmental epidemiology within KDHE. The ESS maintains a state-wide surveillance system for communicable and other reportable diseases and conditions, processing approximately 2000 disease reports per year. These data are used for purposes of disease outbreak identification and control and to describe disease patterns among Kansas residents. ESS plays a central role in the investigation and control of communicable disease outbreaks in the State, often sending staff into the field to coordinate the investigation. The section responds to over 3000 telephone inquiries annually. Additionally, 24-hour access to an epidemiologist is provided for emergencies by means of a pager.

Hospital capacity is an issue that deserves great attention during bioterrorism response planning. Hospitals are distributed throughout Kansas but in some areas there is little surge capacity and hospitals could become quickly overwhelmed during a public health emergency.

Emergency response in Kansas is subject to the lead authority of the Kansas Division of Emergency Management (KDEM), as explained below in the section on authority. This includes preparedness and response to bioterrorism events.

### **2. ASSUMPTIONS**

- i. The State of Kansas is subject to a naturally occurring infectious disease emergency or a covert terrorist attack (BT event).
- ii. Response to an occurrence of a biological incident/terrorism event is dependent

on the credibility, scope and nature of the incident.

- iii. KDEM will be the lead state agency for preparedness and response to a bioterrorism incident. KDHE will be the lead state agency for public health issues related to a bioterrorism incident. KDHE will work in close connection with KDEM and provide epidemiologic investigation and advice regarding specific control measures required during an incident.
- iv. Preparedness and response to a bioterrorist incident are multi-disciplinary, multi-jurisdictional events that will require broad interagency planning and response approaches as well as cooperative partnerships between the federal, state, and local governments.
- v. Preparedness and response to bioterrorism events for the various tasked agencies will generally parallel their normal, day-to-day functions. To the extent possible, the same personnel and material resources will be employed in both cases.
- vi. Once a large scale epidemic has moved beyond local and State levels, coordinated federal assistance will be needed to control the disease that is moving through the population. Although the federal government is in a unique position to coordinate an effective emergency response to a bioterrorist attack or other wide scale disease outbreak, this cannot be done without local and State cooperation and partnership. Response on the scale needed requires continuous communication and coordination across large regions of the country with a wide array of emergency service, medical, law enforcement, and national security organizations. Only through full collaborations between all levels of government will a successful response be executed.

### 3. OUTBREAK CONTROL - GENERAL PRINCIPLES

#### a. Infectious Diseases and Bioterrorism

Infectious diseases are human or animal illnesses caused by microscopic agents, including viruses, bacteria, parasites, and fungi or by their toxins. They may be spread by direct contact with an infected person or animal, by ingesting contaminated food or water, by insects such as mosquitoes or ticks (disease vectors), by contact with contaminated surroundings such as animal droppings, or by air. One aspect of modern infectious disease control is the realization that infectious agents have the potential of being used by individuals or groups who wish to cause injury, panic, and confusion in the civilian population for personal or political reasons. **For the purpose of this plan, bioterrorism (BT) will be defined as “the intentional or threatened use of viruses, bacteria, fungi, or toxins from living organisms to produce death or disease in humans, animals, or plants and to disseminate terror among the population”.**

b. Importance of Public Health at the local level

A naturally occurring outbreak of infectious disease is almost always identified after public and private health care providers at the local level have diagnosed a sufficient number of cases of the disease to attract the attention of the public health surveillance system at the local, state, or federal level. Likewise, an unannounced act of BT must be detected based on the appearance of sick individuals at the local level. The affected area may eventually include one local community, several communities, unincorporated areas of the state, other states, neighboring countries, or multiple countries around the world (such as in the case of a contagious disease like smallpox).

c. Public Information issues

When a disease outbreak appears in a community, there may be little or no public information initially available about the outbreak or the agent causing it. Once an outbreak of an infectious disease is discovered and made public, there is a need for professional and articulate public information from a credible medical or public health source. Bioterrorism-related outbreaks are certain to generate a very high level of public and media interest. The discovery of a release of a biological agent affecting the public or its water and food supply will need the release of immediate, credible public health information. *For the purpose of the control of public concern and panic, the ability to rule out the credibility of an announced attack is as critical as the ability to confirm that the attack was indeed perpetrated.* This requires the presence of a strong epidemiologic and public health surveillance capacity and a good public information network. Under a local state of emergency, the local public information officer has the primary responsibility to coordinate all public information functions. The KDHE office of public information will assist in these functions.

4. **AUTHORITY**

a. Federal authority

Presidential Decision Directive 39 (PDD-39), *United States Policy on Counterterrorism*, specifies the responsibilities of federal agencies and their relationships to one another for terrorism crisis management and consequence management. As defined in PDD-39, crisis management involves actions to anticipate, prevent, and respond to acts of terrorism and is predominantly a law enforcement response. United States' law assigns primary federal responsibility for these actions to the Federal Bureau of Investigation (FBI). The Federal Government exercises primary authority to prevent, preempt, and terminate threats or acts of terrorism and to apprehend and prosecute the perpetrators; state and local governments provide assistance as required. Consequence management is assigned to the Federal Emergency Management Agency (FEMA). Consequence management involves measures to protect public health and safety, restore essential government services and provide emergency relief to governments, business and individuals affected by acts of terrorism. Consequence management is generally a multi-function and multi-agency response coordinated by emergency management. While the responsibility of

crisis management in the act of a terrorist event remains with the FBI, it is important to note that K.S.A. 65-119 gives authority to the local health officer to maintain supervision over cases of infectious or contagious disease during their continuance and to ensure “provisions... as to isolation, restriction of communication, quarantine and disinfection are duly enforced.”

b. State authority

Preparedness activities against BT incidents are the primary responsibility of the Kansas Division of Emergency Management (KDEM), with KDHE having a lead role for the public health components. This plan represents the main reference document for these preparedness activities. KDEM supports training at the local level and provides planning standards for use in local emergency operations plans (K.A.R 56-2-1). K.S.A. 48-926 requires the division of emergency management to prepare and maintain a state disaster emergency plan, and K.S.A. 48-927 requires the maintenance of a State resources management plan.

Detection of a covert BT event is the responsibility primarily of KDHE, through public health surveillance activities. K.S.A. 65-101 gives the secretary of Health and Environment authority to "investigate the causes of disease, including especially, epidemics..."

Consequence management for emergencies at the State level is the primary responsibility of KDEM. KDHE supports KDEM with technical advice on public health measures necessary to contain the effects of BT incidents. The Commission on Emergency Planning and Response (CEPR) was created to facilitate a coordinated effort for mitigation, preparedness, response, and recovery from emergencies and disasters in Kansas, as defined in K.S.A. Chapter 48, Article 9, (Kansas Emergency Management Act). Members of the CEPR include the agency head or designee from: the state Fire Marshall; the Department of Health and Environment; the Department of Transportation; the Kansas Highway Patrol; the Adjutant General; and the Department of Commerce and Housing. Membership also includes seven members appointed by the Governor: two representatives of counties; two representatives of cities; and three representatives of business and industry. The State of Kansas emergency policy and procedures are contained in the EOP which assigns responsibilities for “design, conduct and evaluation of programs to prevent and control disease” to KDHE. In the event of an actual bioterrorist incident, the Kansas EOP will be implemented.

Authority for the management of public health threats is given to the secretary of Health and Environment in several state laws. K.S.A. 65-101 gives the secretary authority to "take action to prevent the introduction of infectious or contagious disease into this state and to prevent the spread of infectious or contagious disease within this state... [as well as] adopt rules and regulations necessary to carry out [those] provisions..."

K.S.A. 65-128 allows the secretary of Health and Environment to designate infectious or contagious diseases and "to adopt rules and regulations for the isolation and quarantine of such diseases and persons afflicted with or exposed to such diseases as may be necessary to prevent the spread and dissemination of diseases dangerous to the public health." K.S.A. 65-126 gives the secretary authority to "quarantine any area in which any of these diseases may show a tendency to become epidemic" and

implies that the same power is given to the local health officer.

c. Local authority

Local officials and agencies have a key role and legal responsibility in the preparedness and response to BT incidents. The authority given to local health officers for isolation and quarantine is similar to that given to KDHE as described above. K.A.R. 28-1-5 states that "when conditions of isolation and quarantine are not otherwise specified by regulation, the local health officer or the secretary of health and environment shall order and enforce isolation and quarantine of persons afflicted with or exposed to infectious or contagious disease." That same regulation goes on to say that "isolation or quarantine shall be ordered in conjunction with investigation of infectious or contagious disease cases and outbreaks for the examination of persons reasonably suspected of having these diseases, and to obtain specimens from these persons for laboratory evidence suggestive of infectious or contagious disease." K.S.A. 65-129 reinforces the authority of the local health officer to establish a quarantine by making any person "who leaves any isolation area of a hospital or other quarantined area without the consent of the local health officer having jurisdiction, or who evades or breaks quarantine or knowingly conceals a case of infectious or contagious disease" guilty of a class C misdemeanor.

Counties are to have local emergency operations plans and are required to submit a copy of their plans to the KDEM. KDEM supports training at the local level and provides planning standards for use in local emergency operations plans (K.A.R 56-2-1).

d. Other authority issues

KDHE has legal authority to require physicians and laboratory directors to report specific diseases, conditions, or laboratory test results in an appropriate and timely manner. The Kansas disease reporting regulations were amended in 2000 to include the requirement to report potential bioterrorist agents and suspected bioterrorist events.

## **Chapter 2 - Preparedness**

### **1. INTRODUCTION**

Combating biological terrorism will require capitalizing on advances in technology, information systems, and medical sciences. Preparedness will require a re-examination of core public health activities (e.g., disease surveillance) in light of these advances. Preparedness efforts by public health agencies and primary health-care providers to detect and respond to biological terrorism will have the added benefit of strengthening the capacity for identifying and controlling other illnesses, injuries, and emerging infectious diseases.

### **2. ASSUMPTIONS**

- i. A covert bioterrorist attack or other infectious disease emergency would go undetected during the incubation period of the disease agent.
- ii. The assistance of state and federal agencies will be needed to promptly identify clusters of disease and organize a timely response.

### **3. PREPAREDNESS ACTIVITIES**

Appendix A contains a list describing the activities that have been identified for preparedness purposes for all agencies involved. This appendix is the base for the discussion in the remaining sections of this document.

### **4. OPERATIONS AND DESCRIPTION OF THE ACTIVITIES**

#### **a. Vulnerability Assessment**

The federal Office of Justice Programs asked all local jurisdictions in 1999 to participate in a vulnerability profile as part of the national Domestic Preparedness Equipment Support Program, a federally funded initiative to supply local emergency responders with needed equipment. This was meant as a planning device to determine the most likely scenario that could occur locally, to identify the most likely persons/groups that might launch a BT or chemical event, and to identify local facilities that, if targeted, would overwhelm the local jurisdiction's ability to respond. The public health assessments will assist local and State public health systems in determining our ability to rapidly and effectively respond to biological

and chemical agents as well as other acute public health emergencies.

b. Surveillance

i. Definition

Public health surveillance is defined as the systematic collection, analysis, interpretation, and dissemination of health data on an ongoing basis, to gain knowledge of the pattern of disease occurrence and potential in a community, in order to control and prevent disease in the community. Surveillance is the key to tracking the incidence and prevalence of endemic diseases, and recognizing emerging or intentionally released infectious diseases in a community.

ii. Kansas Surveillance Mechanisms

Surveillance in Kansas is primarily based on a passive reporting system. Health care providers, laboratories, hospitals, school health nurses, and other entities send reports to state and local health departments based on a set of state laws and regulations.

iii. Syndromic Surveillance

Syndromic Surveillance represents a way to implement this type of early detection of a BT event. Syndromic Surveillance is based on pre defined symptoms or syndromes (i.e., a group of symptoms) reported by pre-identified sentinel locations throughout the state. Syndromic surveillance presents numerous challenges, such as recruitment of sites willing to participate, resource-intensive processes, and the need for a very timely reporting and analysis system.

iv. National Surveillance

Disease Surveillance at the Federal level primarily falls within the jurisdiction of the CDC which maintains over 100 surveillance and health information systems. Sources of data for public health surveillance vary greatly. Because there are multiple data sources, different information requirements, multiple distinct users, and different partners with whom CDC collaborates to obtain data for specific program areas, no single surveillance system captures all the information required to monitor the health of the public.

c. Communications and the Health Alert Network

i. Health Alert Network (HAN)

The Health Alert Network (HAN) is a nationwide, integrated information and communications network sponsored by the CDC and implemented at the State and local level. The HAN is based primarily in providing secure, high speed Internet connection to

state and local public health agencies and in supporting the development of software applications that can take advantage of this secure network. The HAN will support an early warning and response system to address BT and other health threats, providing a common platform to strengthen preparedness at the local and state levels.

ii. Health Alert Network - Implementation in Kansas

The Health Alert Network is being implemented in Kansas. Federal funds are being used to enable Internet connectivity and pager alert functionality for local health departments. As a result, all Local Health Departments in Kansas currently have an Internet connection, with 62 of them (covering 93% of the state population) having always-on, high speed connections.

In the event of a BT threat, assigned individuals throughout local communities can be alerted immediately by an alphanumeric paging system. Upon notification and report back, the individuals are able to securely access pertinent information essential for containing a disease outbreak or a BT event.

iii. Local Emergency Communications

For the HAN to be fully effective a comprehensive, statewide local emergency contact data base must be maintained by KDHE personnel. This data base should contain emergency contact information from each jurisdiction in Kansas, including local health department, hospital, emergency services, and law enforcement emergency contact information. In the event of a BT or other infectious disease emergency, this information will be useful for rapid communications by broadcast fax transmission, e-mail, telephone, and the HAN paging system. Local health departments will be involved in the acquisition and update of the information for their own jurisdiction and will have access to that information through a secure Internet connection.

iv. State and Federal Communications

In the event of a public health emergency, federal officials need reliable mechanisms to contact state agencies. This is accomplished via conference calls and dedicated electronic information systems. Another means of emergency communication is Satellite Conferencing. The CDC may use this medium for real time rapid communication among several Federal, State and local officials from different locations across the country. KDHE maintains a list of emergency satellite conference sites in Kansas that have agreed to be free sites in the event of an emergency broadcast and will discontinue any other programs in order to downlink the emergency broadcast.

d. Epidemiologic Preparedness

For an effective epidemiologic investigation to commence after a BT event has occurred, pre-planned epidemiologic protocols, guidelines, tools and resources should be in place at the state and local level.

e. Health Care Preparedness at Local Level

The health care community in Kansas consists mainly of public and private practitioners, clinics, and hospitals. Each of these entities has a role in preparing for BT or infectious disease emergencies.

i. Healthcare Providers

Healthcare providers in Kansas should be alert to illness patterns and diagnostic clues that might signal an unusual infectious disease outbreak due to the intentional release of a biological agent and should report these concerns immediately to their local health department. The covert release of a biological agent will not have an immediate impact because of the delay between exposure and illness onset. Consequently, the first indication of a biologic attack may only be when ill patients present to physicians or other healthcare providers for clinical care. Physicians should be informed about how to report any unusual occurrence of disease they observe.

ii. Clinics and Hospitals

(1) Disaster Response Infrastructure

Clinics and Hospitals should maintain updated disaster operation plans addressing specific bioterrorism components.

(2) Surveillance

- \* Provide continuing education for increased awareness among medical and laboratory staff regarding the potential threat of BT and the key diagnostic and treatment clues to high threat agents.

- \* Ensure that all clinical staff are aware of their responsibility and the mechanisms to report all suspect or confirmed cases of notifiable diseases including any unusual manifestations or cluster of illness.

- \* Consider instituting a syndromic surveillance system to monitor for infectious disease outbreaks, in collaboration with KDHE.

(3) Laboratory issues

- \* Plans for training all laboratory staff regarding diagnostic and safety issues related to testing high threat bacterial bioterrorist agents.

- \* Where relevant, ensure that appropriate level bio-safety cabinets are present, as well as staff trained in their use and the appropriate handling of these specimens.
- \* Develop protocols to ensure coordination with the KDHE lab and law enforcement (e.g. FBI) for specimen submission, transportation, and confirmatory testing of any suspect bioterrorist agent.

(4) Mass care issues

- \* Ensure the ability to quickly triage large numbers of potentially infectious patients presenting in the emergency room, if needed. Establish a mechanism to separate the “worried well” from symptomatic persons, and to move them quickly away from the urgent care section of the emergency room.
- \* Ensure that appropriate infection control measures are followed, depending on the suspected or confirmed biologic agent.
- \* Develop a plan to cancel all non-urgent admissions and transfer all non-critical patients to hospitals outside of the affected area. This may include pre established memos of understanding with other hospitals for this purpose.
- \* In the event that patient volume precludes routine patient placement in single rooms, have contingency plans to cohort patients who present with similar syndromes in a designated clinic or ward.
- \* Be prepared to open closed patient wards or other areas (e.g., cafeteria, auditorium, medical school areas) to care for an increased volume of inpatients. The US Public Health Service Disaster Medical Assistance Teams may be available to supplement hospital staffing needs as well as staff alternate acute care facility sites.
- \* Implement contingency plans for handling large numbers of potentially infectious patients with respect to the ability to mobilize sufficient personal precautions supplies (masks, gloves, gowns) and the handling of large amounts of infectious waste (chemical treatment).
- \* Protocols for cleaning, disinfecting and sterilizing equipment and the environment that adhere to current standards.
- \* Ensure that the hospital facility is currently on KDHE’s emergency contact data base.
- \* Pre-determination of sources for additional medical equipment and supplies.

(5) Employee Health Issues\Personal Protection

Unlike chemical terrorism, decontamination is typically not necessary or recommended for patients presenting with disease due to bioterrorist agents. Washing with soap and water and routine laundering of clothes would provide adequate decontamination for patients who present immediately after direct exposure to an aerosolized product. Most agents of BT are generally not transmitted person to person and re-aerosolization of these agents is unlikely. As always, all patients should be managed using standard precautions. For certain disease syndromes, additional precautions may be needed.

Specific issues to consider:

- \* Ensure sufficient personal protective equipment is available in the event of a large outbreak of a communicable disease requiring respiratory or contact precautions, and that staff is appropriately trained in their use. Have sufficient signs to post outside patient rooms/wards.
- \* Develop tracking systems to identify staff who have come in contact with cases before they are recognized, so that prophylaxis can be offered.

(6) Pharmacy Issues - Surge Capacity

- \* Ensure ability to mobilize, distribute and track large amounts of antibiotics and vaccine to patients.
- \* Ensure capacity to provide mass prophylaxis to staff, if needed, depending on the agent involved. Consider maintaining a limited hospital antibiotic stockpile to provide prophylaxis to staff for 2 days, to ensure that the hospital is able to function until additional antibiotic supplies are available.

iii. Mortuary Issues

The local Coroner's office, working in close coordination with the medical community, other government agencies, and the private sector, is in charge to respond to and recover from instances in which large numbers of fatalities occur. The local Coroner's office will serve as the lead agency for disposition of large numbers of deceased individuals. It is the Coroner's responsibility to develop standard operating procedures for such incidents, including contingency plans for the handling, tracking, and temporary storage of a large number of potentially contaminated corpses.

iv. General disaster planning issues

- \* Ensure the ability to increase hospital security, especially in patient care areas and at all entrances.

- \* Ensure the capacity to provide patient and family educational materials that provide clear, consistent and easily understood information. KDHE will work with hospitals to provide fact sheets and other material specific to the event.

- \* Coordinate any communication with the media through the local or state Emergency Operations Center.

- \* Ensure that mental health resources are available to meet needs of hospital staff, patients, and families.

- \* Ensure communication capacity with sufficient two-way or 800-megahertz radios and cell-phones, in the event that land line communications are down.

- \* Ensure a system to track patients and their personal belongings

- \* Ensure the capacity to accurately track costs for reimbursement by federal disaster funding, if available.

- \* Conduct regular drills to maintain awareness of roles and responsibilities for infectious disease disasters. Partner with local emergency management offices for this purpose.

f. Laboratory Capacity

i. KDHE laboratory

Laboratory diagnosis will be a critical step in the timely control of a BT event. To be prepared for such responsibilities, the KDHE laboratory trained key staff and local laboratories to perform detection tests for possible BT agents.

ii. Local laboratories and Laboratory Response Network

In cooperation with the Association of Public Health Laboratories and the Federal Bureau of Investigation (FBI), CDC established a multi-level Laboratory Response Network (LRN) for BT. The LRN comprises local, state, and federal laboratories and facilitates sample collection, transport, testing, surge capacity, and training for laboratory readiness to identify critical biological agents. Clinical and public health laboratories in the network are identified by increasing testing capability from Level A to Level D. Currently, all 50 state public health laboratories are registered members of the LRN.

g. Pharmaceutical and Medical Supplies

i. Local Planning for Emergency Pharmaceutical Supplies

Pharmacists play a vital role in planning for and respond to BT. They can provide up-to-date information on antimicrobial agents and vaccines, including availability, location, storage requirements, dosages, adverse effects, and administration routes. Calculating exactly what quantities of supplies will be needed for the management of casualties of a BT disaster is challenging, and pharmacists can assist with that task. Part of a hospital disaster plan should include sending an extra pharmacist to the emergency department. Plans should also outline a mechanism for quickly obtaining pharmaceuticals from local, mail-order, or online suppliers in an emergency situation.

It is recommended that local communities be self-sufficient for about 36-48 hours after an incident, since it may take that long to obtain outside state and federal assistance. If financially feasible, some limited local stockpiling of certain antidotes, like antimicrobials, may be necessary, particularly to assure initial prophylaxis for first responders and hospital staff.

ii. CDC's National Pharmaceutical Stockpile Program

Release of a biological agent targeting a civilian population will require rapid access to large quantities of pharmaceuticals and medical supplies. Such quantities may not be readily available unless special stockpiles are created. No one can anticipate exactly where a terrorist will strike, and state or local governments do not have the resources to create sufficient stockpiles on their own. Therefore the National Pharmaceutical Stockpile Program, or NPS, was created by the federal government as a resource for the entire United States. Within approximately 12 hours from the activation, one or more push packages pre-positioned throughout the country can be flown to the affected area. These packages contain antidotes, vaccines, ventilators and other supportive medical supplies. In addition, the Vendor Managed Inventory (VMI) system (part of the NPS program) can deploy pharmaceutical and other medical supplies ordered to meet specific needs within 48 hours.

The NPS supplies are delivered at pre-identified airports to a designated state representative. Repacking, transportation, and distribution of these supplies are the responsibility of state and local authorities.

Planning for receiving the NPS will require the logistical support, cooperation and input of many federal, state, and local agencies.

h. Exercises, Education and Distance Learning

i. Exercises

The development of emergency plans and the organization of resources does little good if exercises are not conducted to practice how to use those assets. Local training exercises are usually facilitated by emergency management offices. The necessity of specific expertise on diseases associated with BT has required public health agencies to become more involved in the participation and development of these training and exercise programs.

ii. Education and Distance Learning

Learning occurs through a variety of methods and face to face interaction with an instructor is not always necessary nor available. Distance learning is the process of providing instructional material to interested participants without the need for them to be in the same location as the presenter. This allows individuals in geographically dispersed locations access to material relevant to their field. A variety of delivery methods can be utilized that decrease the time and place constraints that often hinder professionals from attending training.

i. Local Planning

If a bioterrorist event occurs in Kansas, it will unfold in great part at the local level, and the expertise of local public health officials will contribute to the appropriate public health response in their communities. Initially the responsibility to identify and respond to covert BT, as well as protect the health of their communities, falls upon local public health agencies. Public health plays a role that local law enforcement, emergency response agencies, and medical providers are not necessarily equipped or have the expertise to perform. For this reason, it is essential to have a local plan available that outlines an appropriate public health response specific for that community.

An effective local BT preparedness and response plan should assist local public health officials and their partners in identifying their public health and safety roles when responding to BT. Although local plans may focus on the role of public health, it is important to note that the public health response to a bioterrorist event is part of a larger response that will involve the local health care community, law enforcement, and other emergency management authorities at the local, state, and federal levels. An effective plan will help local public health agencies coordinate their piece of this larger response, and plan a joint response with partners in neighboring local and state public health systems.

A template to assist in the development of local BT preparedness plans has been developed by KDHE. Each local health department is encouraged to complete their local plan as soon as possible.

j. Response to overt or announced attacks

The response to overt or announced attacks is similar in many aspects to emergency responses to other threats. The difference is primarily the need for protection of first responders against possible infectious agents, and the likely involvement of many responders from multiple agencies, including public health.

## **Chapter 3 - Detection and Response**

### **1. ASSUMPTIONS**

- i. A covert bioterrorist attack or other infectious disease emergency would go undetected during the incubation period of the disease agent. The situation will probably first be detected by an increase of common medical symptoms as seen by private health care providers and hospitals. Even then, especially in the event of a limited attack, the realization that a problem exists may not happen until surveillance methods at the State or local level detect an abnormally high incidence of the disease or disease syndromes over several jurisdictions. In a covert biological release, there will most likely be no explosion, fire, or visible crime scene. Therefore, the first responders to a biological event will be physicians, emergency room personnel, and well-trained and prepared public health practitioners who detect the unusual event, and report it to the appropriate authorities.
- ii. In an overt release, officials will have advanced notice before an outbreak appears, but most local public health systems will be overwhelmed by community requests for information, prophylaxis, and treatment as soon as the threat is made public.
- iii. The scene at a BT overt event will always be treated as a crime scene.
- iv. There may be multiple events (e.g. one event in an attempt to influence another events's outcome).
- v. Responders and medical personnel may be at risk in certain kinds of BT events. Proper protection of responders and forensic personnel is critical.
- vi. A public health emergency large enough to require the activation of this plan will generate the assistance and support from the CDC and other federal agencies necessary to perform the operations described in this plan.
- vii. There is likely to be a stronger reaction and fear from the public than with other types of terrorist incidents. The thought of exposure to a deadly biological agent or toxin may evoke terror in most people.

## 2. **RESPONSE ACTIVITIES**

Appendix B contains a list describing the activities that have been identified for response purposes for all agencies involved. This appendix is the base for the discussion in the remaining sections of this document. Readers are encouraged to refer throughout this document to the lists contained in appendix B.

## 3. **OPERATIONS**

### a. Event Detection and Confirmation

Because of the scope and magnitude of possible consequences to the public, a BT event must be determined to be credible before an official investigation or announcement is made. The process of confirmation of a BT event needs to start at the local level, as a joint effort of local law enforcement and public health officials.

### b. Communication Procedures

It is imperative that communication from local to state public health officials be rapid and effective.

### c. Protection and Safety of First Responders

#### i. Overt BT Attack

Public Health personnel will likely not be the first responders to an announced BT attack, but they may be among the professionals called for assistance after other first responders have assessed the situation and secured the area. Protection of these responders is of utmost concern in dealing with potentially deadly BT agents. The protocols on personal protection established during the planning stage should be carefully adopted by all the respondents on the scene.

#### ii. Covert BT Attack

In a covert BT attack, the “first responders” may be public health professionals engaged in an infectious disease investigation or health care providers treating sick patients. It is therefore important that health care providers, public health nurses, and epidemiologists follow appropriate precautions when dealing with patients or potentially exposed individuals. If it is determined that exposure to an infected individual has put a worker at risk of infection, a physician should be contacted and appropriate postexposure prophylaxis or treatment should be initiated as soon as possible.

d. Laboratory Diagnosis and Specimen Submission

Procedures for medical and laboratory diagnosis as well as specimen submission depend on the circumstances of the event.

i. Overt event

In an overt release of a suspected BT agent, sample submission and laboratory diagnosis may be necessary before the biological threat to the community or individuals exposed can be determined. If local respondents concur that the situation is clearly a very low threat, no laboratory test will be performed.

In higher level threat cases, officials will determine what type of response, if any, is necessary. Assuming a credible threat exists, any necessary environmental samples should be obtained by HAZMAT professionals who will then coordinate shipment to the appropriate lab through the KHP and the FBI.

ii. Covert event

If there is a suspicion, based on preliminary lab test or medical diagnosis, that a BT attack may have occurred, local laboratories (i.e., level A laboratories) should perform first-level tests to help rule out cases, whenever possible. The local medical or laboratory facilities (hospitals, clinics, local labs, practitioners, public health departments, etc.) should submit positive isolates for confirmation to a level B laboratory.

e. Command and Control

Public Health officials have not traditionally been involved with command and control activities during emergency events. However the scope of operations needed for managing a BT event will likely necessitate public health involvement in the Incident Command System (ICS). This section will briefly describe the ICS and public health involvement during a BT event.

i. Incident Command System (ICS)

The ICS uses a pre-established, formally organized command structure to coordinate and effectively use available resources. The rules of the ICS designate the “first unit or member arriving on the scene” as the incident commander (IC). In a covert attack, public health professionals will most likely be the first to realize that a BT event has occurred. Therefore, at least initially, the State Epidemiologist or the local public health administrator will be the most likely candidate for the position of field incident commander if one is needed. However, it is likely that a covert attack will not require a “field” incident command post since there will likely not be a specific event or incident scene. The incident commander is selected on the basis of who has primary authority for overall control of the incident.

Due to the multi- jurisdictional nature of a BT event, a unified command system will most likely be used. Public health's role in a unified command structure may range from incident commander to operations section chief to expert advisor. Public health officials must be prepared for any of these roles and will contribute to the ICS by helping to determine the overall objectives of the response, and joint planning for, and conducting, integrated tactical operations including the utilization of assigned resources.

ii. Emergency Operations Center (EOC)

The Kansas Department of Emergency Management maintains the State Emergency Operations Center (EOC) which is used to coordinate response activities to emergencies and disasters that are beyond the reasonable control of a field command post. Local jurisdictions have similar offices of Emergency Management and the response would work similarly at the local level. State and local public health agencies should have a pre-appointed individual ready to represent them at the EOC.

f. Mass Care Response

i. Disaster Response Plan

As soon as a BT event is suspected, the hospital disaster response plans in the affected areas should be activated.

ii. Source of pharmaceutical products

Hospitals, pharmacies, local health departments, and health care providers should complete a rapid inventory and availability report based on the expected requirements, as determined by the type and magnitude of the exposure. Local hospitals and pharmacies should have on hand a small supply of medications that can be used prior to the arrival of the CDC National Pharmaceutical Stockpile (NPS). However, these stocks may not be sufficient to meet unexpected high demands during a BT emergency. Protocols for acquisition of pharmaceutical products through state and federal resources should be activated, if necessary.

iii. National Pharmaceutical Stockpile (NPS)

The NPS can be activated to provide medications and other medical supplies. If a push package is dispatched, a Technical Advisory Response Unit will arrive ahead of the Push Package. Receipt, transport, security, and distribution of medications are the responsibility of state and local officials.

iv. Priority for distribution of medications and vaccines

During a BT event, medications and vaccines may be in short supply. KDHE recommends that medications and vaccines be distributed based on exposure risk, with the ultimate goal of maximizing the control of the spread of the disease. Those individuals that are at higher risk of exposure (e.g. because they were in the vicinity of the BT incident or due to other epidemiologic factors) will receive priority for receiving pharmaceutical products.

g. Quarantine/Isolation Procedures

In Kansas, public health authorities (through the secretary of KDHE or the local public health officer) have the power to quarantine individuals in order to control the spread of disease.\*

The decision of whether or not to quarantine or isolate individuals will be based on the type of event and the nature of the disease agent as well as several other factors. Depending on the severity of the situation, this decision may be made by the local public health officer or by multiple decision making officials at both the state and local level as well as the Governor and other officials.

h. Public Health Response

After receiving a report of a suspect or confirmed BT event, KDHE epidemiologists, in consultations with local and federal officials, would begin an epidemiologic investigation into the incident. If the event was unannounced, the investigation process would be initiated based on information gained by routine surveillance mechanisms. The epidemiologic investigation may be conducted by epidemiologists from KDHE, CDC and local health departments. The investigation will focus on the distribution (time, place, person) and determinants (causes and risk factors) of the disease in the specified population in order to provide data for directing public health actions to control and prevent illness.

Active sentinel syndromic surveillance requires the active participation of epidemiologists working to gather disease information from key sites or providers. Syndromic surveillance may also be implemented. KDHE will take the lead in establishing these surveillance activities. Data will be analyzed continuously for trends and patterns, and any clustering or increase in a particular disease or syndrome will be investigated immediately by local, KDHE, and CDC epidemiologists.

i. Health care providers at the local level

i. Enhanced Surveillance

Although active sentinel syndromic surveillance would be ideal for every location, realistically there will not be enough epidemiologists to cover every site that patients might come to for health care. KDHE will have to rely on local clinicians and laboratorians to identify and report unusual clusters of communicable diseases in a timely fashion. Vigilance for unusual clusters or manifestations of disease is critical to the early detection of any new infectious disease outbreak. In responding to a known attack, local practitioners must be

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\*See section 1.4 for details on public health authority concerning quarantine

willing to exert an extra effort in collecting and sharing this information with local and state public health officials.

ii. Tracking of morbidity and mortality information in hospitals

In responding to a BT event, health care facilities will need to continually track morbidity and mortality data to facilitate community wide assessments of hospital capacities and needs. Predesignated staff from each health care facility should be responsible for tracking this information on a daily basis, with regular communication to a centralized location such as the emergency operations center.

j. Communications

- i. In the event of a BT event, providers and health care facilities will need to maintain communications with public health officials at both the local and State level. It will also be necessary to provide and rapidly distribute fact sheets and/or health advisories on the medical management of the specific disease to all clinical staff and the public as needed. KDHE and the health alert network (including local health departments) will have primary responsibility for the dissemination of this information.
- ii. In addition, continuous, reliable information to the public and the media will need to be provided, preferably through a centralized public information office. Local public information officers may fulfill this function under a local state of emergency. The KDHE Office of Public Information will be ready to assist or lead, if necessary.